Asteroid Attack!

A few years ago, astronomers discovered a mile-wide rock tumbling through space. At first, the scientists feared that the newly discovered space rock would plow into Earth on February 1, 2019.

Scientists named the space rock NT7 and clocked its speed at 7 miles per second. The scientists thought the asteroid was heading straight for Earth!

Asteroid Strike!

A mile-wide asteroid could take out an entire continent, scientists say. Fearing the worst, scientists kept their eyes on NT7. They plotted its orbit, or path, around the sun.

After watching NT7 for several weeks, scientists found out that NT7 would miss Earth on February 1, 2019.

Near-Earth Asteroids

Most asteroids orbit the sun between Mars and Jupiter. NT7, however, is a near-Earth asteroid. Near-Earth asteroids orbit the sun close to Earth. NT7 orbits the sun once every 837 days. Its orbit sometimes takes NT7 as far from the sun as Mars. At other times, it is within Earth's orbit.

Scientists know about nearly 350 near-Earth asteroids. They carefully map the orbits of those asteroids to make sure the asteroids don't come too close to our planet.

Scientists say anywhere from 500 to 1,000 near-Earth asteroids are yet to be discovered. Scientists are searching the sky for them. They want to have plenty of warning if one comes too close.

Sudden Impact

An asteroid the size of NT7 may one day come close to Earth, scientists say. "An object of this size would be expected to hit Earth every few million years, and as we get additional data I think this threat will go away," said Donald Yeoman of the National Aeronautics and Space Administration (NASA).

Yeoman and most other scientists say you shouldn't worry too much about asteroids. Most don't think a space rock will pose a threat in the near future. If an asteroid does come near Earth, scientists might be able to destroy it.

One scientist, for instance, said a large laser could be used to zap NT7 if the asteroid came too close to Earth.

What's a Comet?

Many people often confuse asteroids and comets. Asteroids are chunks of rock in space.

Comets are chunks made of ice, dust, and rock. Comets spend most of their time far from the sun. When a comet nears the sun, heat from the sun warms it, causing the ice to melt and boil off. The dust particles of the comet also start to boil off. The gas and dust forms a comet's long tail, which is illuminated by the sun. After rounding the sun, the comet moves farther away from the sun. The comet cools and the tail slowly disappears.